



**FRIEDRICH**

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# Multi Zone Air Conditioner SVC MANUAL(Exploded View)

## DUCTLESS SPLIT SYSTEMS

### **CAUTION**

Before Servicing the unit, read the safety precautions in General SVC manual.  
Only for authorized service personnel.



MODEL : A4UW363FA2 [MR36TQY3JM]

THE EXPERTS IN ROOM AIR CONDITIONING

960-920-03

# 1. Specification

## Outdoor Unit

Outdoor Unit			A4UW363FA2 [MR36TQY3JM]
Capacity(*)		Btu/h Class	34,000
Power Input (Min.~Rated~ Max.)	Cooling	kW	0.77~2.72~ 3.92
	Heating	kW	1.12~3.58~4.1
Running Current	Cooling	A	3.3~11.8~17.0
	Heating	A	4.9~15.5~17.8
Starting Current	Cooling/Heating	A	-
Power Supply		Ø / V / Hz	1/208 - 230/60
Power Supply Cable (Outdoor)		No.x AWG	3 x 12
Transmission Cable (Outdoor to Indoor unit )		No.x AWG	4 x 18 (Including Earth)
Dimensions	W x H x D	mm(inch)	900 x 1,165 x 370 (35 7/16 x 45 7/8 x 14 9/16)
Net Weight		kg(lbs)	95(209.4)
Max. Number of Connectable Indoor Units			4
Compressor	Type		Twin-Rotary
	Qty x Model		GPT425DBA
	Motor type		BLDC
	Oil charge volume	cc	1300
	Oil Type		FVC68D
Refrigerant	Cycle A Charge (at 7.5m)	g(oz)	3,500(123.46)
	Cycle B Charge (at 7.5m)	g(oz)	-
	Type		R410A
	Control		EEV
Heat Exchanger	(Rows x Column x FPI) x No.		(2R x 26C x 17) x 2
	Coil tube dia.	mm(inch)	7(0.276)
	Defrosting Method		Reversing cycle
Fan motor	Capacitor	µF/Vac	-
	Drive		Direct (DC)
	Discharge Direction(Side/Top)		Side
	Air Flow Rate x No. of Fan	CMM(CFM)	60(2,118) x 2EA
Sound Level(H)	Sound Pressure	dB(A)+3	57
Piping Connections	Liquid(Cycle A)	mm(inch)	6.35(1/4) x 4EA
	Gas(Cycle A)	mm(inch)	9.52(3/8) x 4EA
	Liquid(Cycle B)	mm(inch)	-
	Gas(Cycle B)	mm(inch)	-
Piping length spec.	Max. total piping	m(ft.)	75(246.1)
	Max. OD~ID piping	m(ft.)	25(82.0)
	Piping length(no add'l refrigerant)	m(ft.)	30(123.0)
Max. Elevation Difference	Outdoor Unit~Indoor Unit	m(ft.)	15(49.2)
	Indoor Unit~Indoor Unit	m(ft.)	7.5(24.6)
Operation Range (Outdoor)	Cooling	°C(°F)	-10 ~ 46 (14~114.8)
	Heating	°C(°F)	-15 ~ 24 (5~75.2)

### Note:

- Capacities are based on the following conditions:
  - Cooling: - Indoor Temperature 27C(80.6F) DB/19C(66.2F) WB
  - Outdoor Temperature 35C(95F) DB/24C(75.2F) WB
  - Heating: - Indoor Temperature 20C(68F) DB/15C(59F) WB
  - Outdoor Temperature 7C(44.6F) DB/6C(42.8F) WB
  - Piping Length - Interconnecting Piping Length 7.5m
  - Level Difference of Zero

Conversion Formula
kW = Btu/h x 0.0002931
cfm = CMM x 35.3

- Wiring cable size must comply with the applicable local and national code.
- The specification may be subject to change without prior notice for purpose of improvement.

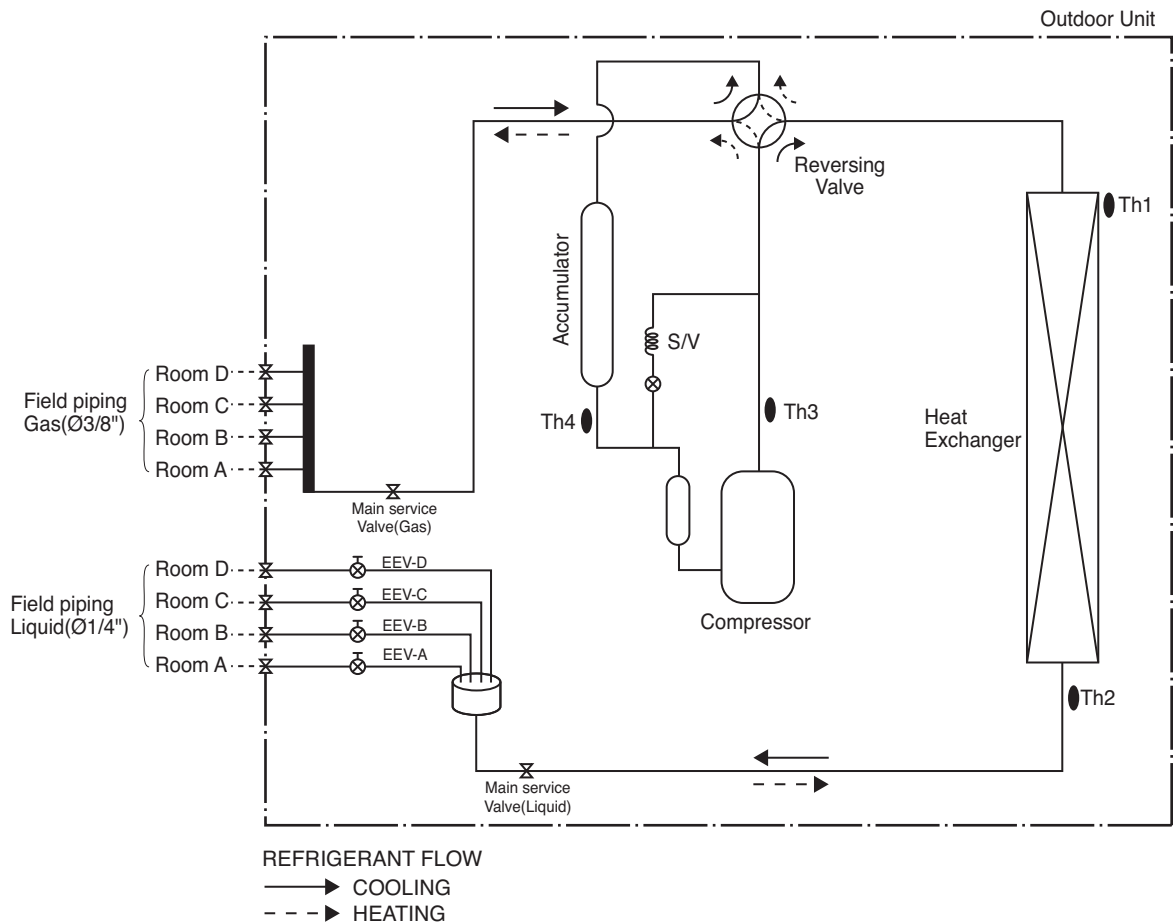
## 2. Function Table

Category	Function	A4UW363FA2 [MR36TQY3JM]
Reliability	Defrost / Deicing	O
	High Pressure Switch	X
	Low Pressure Switch	X
	Phase protection	X
	Restart Delay (3-minutes)	O
	Self Diagnosis	O
	Soft Start	O
	Test Function	X
Convenience	Auto operation(Artificial intelligence)	O
	Auto Restart Operation	O
CAC Network Function	Central control(LGAP)	O
	PDI(Power Distribution Indicator)	PQNUD1S00
	PI485	PMNFP14A0
Special function kit	Low ambient operation	O
Others	Thermistor	-

### Note :

- O: Applied, • X: Not applied, • - : No relation,
- Option: Model name & price are different according to options, and assembled in factory with main unit.
- Accessory: Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

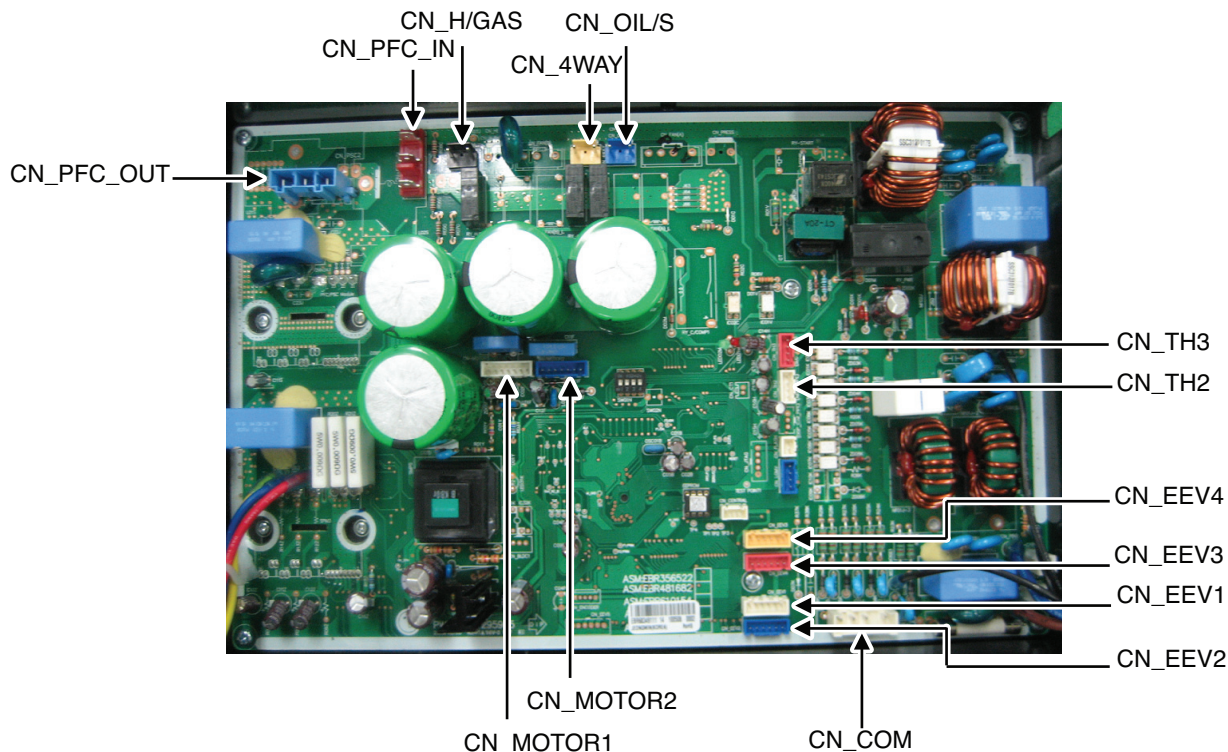
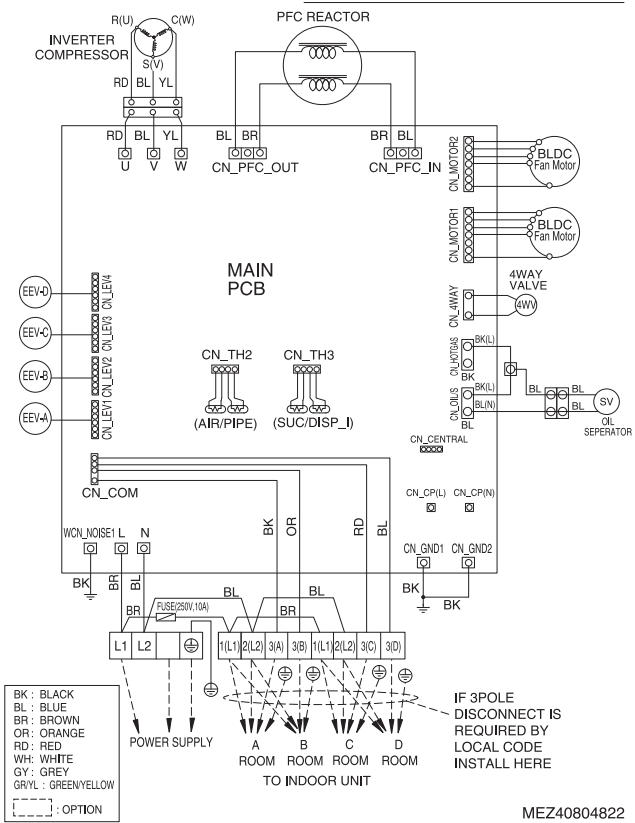
# 3. Piping Diagrams



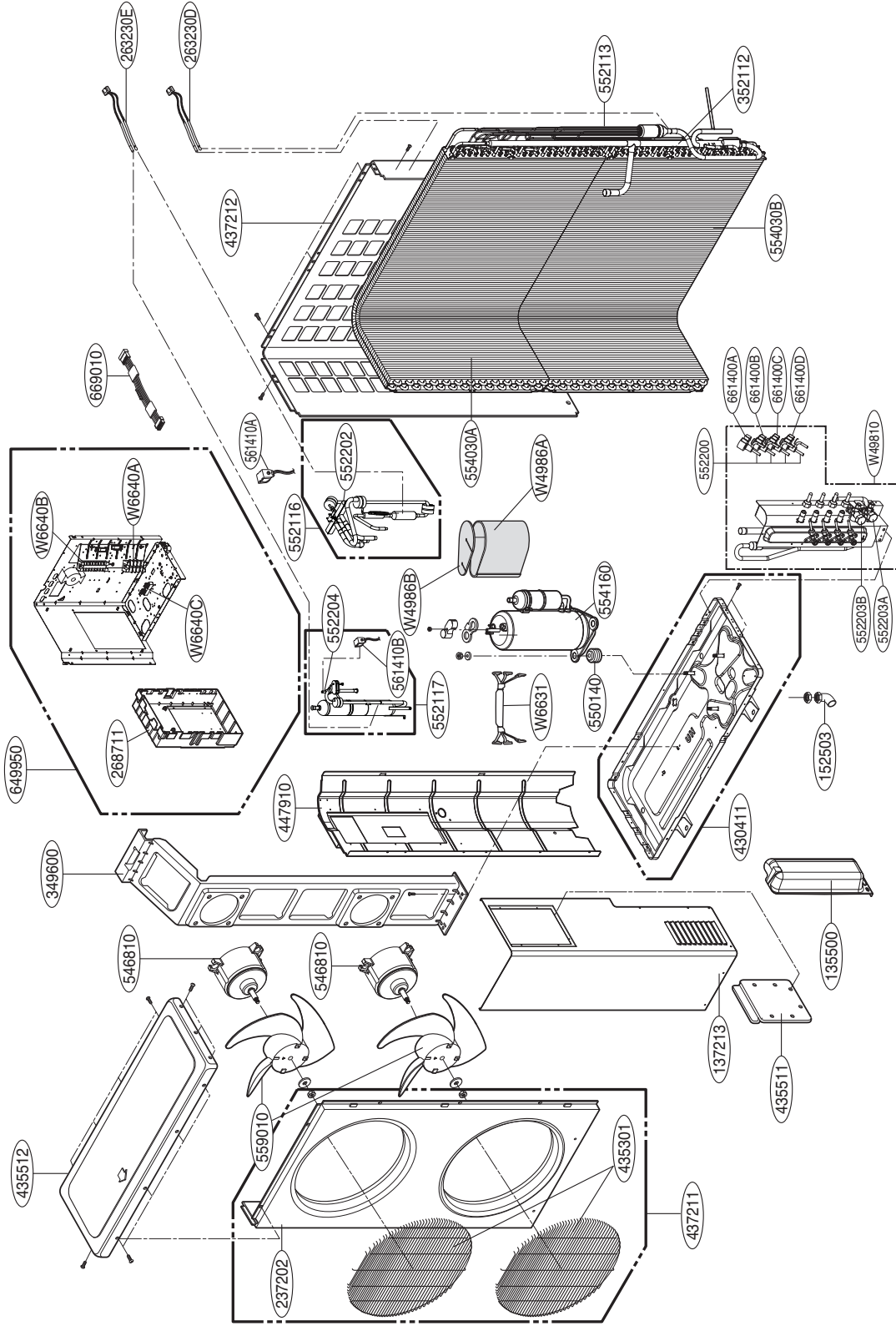
LOC.	Description	PCB Connector
Th1	Thermistor for outdoor air temperature	CN_TH2
Th2	Thermistor for condensing temperature	CN_TH2
Th3	Thermistor for discharge pipe temperature	CN_TH3
Th4	Thermistor for suction pipe temperature	CN_TH3
S/V	Solenoid Valve for Hot Gas/Oil Separator	CN_H/GAS /CN_OIL/S
L/P	Low Pressure Switch	CN_PRESS

# 4. Wiring Diagrams

OUTDOOR WIRING DIAGRAM



# 5. Exploded View





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